Dave S. 5001

STATE OF COLORADO

Roy Romer, Governor
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Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department
of Public Health
and Environment

August 5, 1997

Steve Slaten, RFCA Project Coordinator
Dept. of Energy - Rocky Flats
P.O. Box 928
Golden, CO 80402-0928

Comments on "Plan for Evaluation and Preliminary Proposed Mitigating Actions for Walnut Creek Water-Quality Results - April 1997"

Dear Steve:

I am submitting the attached comments regarding the above plan with the intent that we can continue to focus on the learning opportunities presented.

We believe that the current plutonium water quality standard in Walnut Creek below the terminal ponds is 0.05 pCi/L and that the reported 30-day average of 0.086 pCi/L constitutes an exceedance of Pu at a RFCA Point of Compliance. We acknowledge that you disagree with our contention. All Parties prefer not to devote time or energy to debating this issue, but have agreed to perform the evaluation of the increased levels of plutonium at Walnut Creek and Indiana Street.

We would be willing to meet with you to discuss our comments. If you have any questions or wish to schedule this meeting, please contact me at 692-3013.

Sincerely,

Steve Tarlton
RFCA Project Coordinator

att.

ADMIN RECORD

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Comments on
"Plan for Evaluation and Preliminary Proposed Mitigating Actions for Walnut Creek Water-Quality Results - April 1997"

The Site needs to evaluate **where** the plutonium and americium come from and **what pathways** and mechanisms were involved in the migration from the source to the monitoring locations. In order to do this, the data needs to be evaluated to determine the source, as noted below:

A. The response (3.1.2) for 'Assessment of Existing Data' needs to be thoroughly developed/expanded to include a loading analysis of current physical and chemical data for all locations within Walnut Creek, descriptive statistics of the historical data, and an examination of gain/loss considerations for this event.

B. Sources may be distributed throughout the drainage, therefore an assessment of fate and transport of Pu and Am is needed. This will require evaluation of flow and speciation of the plutonium.

C. Estimating the rate of movement of Pu and Am follows from the above.

Specifically, CDPHE requests the following:

By September 30, 1997:

1. Provide a complete data review, to include flow, Pu and Am concentrations (in pCi/L and pGm/L) for filtered and unfiltered results, TSS, loading in micrograms per event or season/year for each event for each station in the Walnut Creek drainage.

2. Provide the summary descriptive statistics for each of the metrics in #1 above.

3. Provide the gains/losses in micrograms and percentage of upstream load, for each significant reach. Compare the April exceedances to the historic record.

4. Include details of proposed new monitoring locations upgradient of GS10.

5. From review of the data, determine if there is a possible correlation with specific characteristics of the flow events, such as time of year, duration, intensity of storm event.

6. Discuss the recent change from rising-limb sampling and the current volume weighted compositing method of sampling, and how this sampling change affects the results of the analyses.

By December 31, 1997:

1. From the data evaluation, determine whether a source can be identified and quantified, which produced the exceedance at GS10.

2. Identify and quantify any downstream affect from this source.

3. Evaluate/quantify what affects the recent watershed improvements could have had on this exceedance.

4. Identify data gaps and uncertainties in this process of source identification. Describe any modifications that should be made to the actinide migration workplan and/or the present site monitoring plan so that proper evaluations can be conducted.

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